5

25

1.

## CLAIMS

A method for deproteinizing chitosan, comprising the steps of:

- reacting an acidic solution of chitosan, said chitosan containing proteins ≥ 10 a) 0.001 wt%, with an aqueous base to precipitate microcrystalline chitosan; and separating said precipitated microcrystalline chitosan from dissolved b) proteins to produce a microcrystalline chitosan having a protein content ≤ 15 10 ppm. A method according to claim 1, wherein said acidic solution of chitosan comprises 2. an acid selected from the group consisting of hydrochloric acid, acetic acid and 20 lactic acid. A method according to claim 1, wherein said aqueous base is selected from the 3. group consisting of sodium hydroxide, potassium hydroxide, sodium carbonate,
  - 4. A method according to claim 1, wherein said reacting step is carried out at  $6.0 \le pH \le 6.5$ .

and potassium carbonate.

- A method according to claim 1, wherein said reacting step further comprises
  adding a first aqueous basic solution to reach 6.0 ≤ pH ≤ 6.5 and then adding a second aqueous basic solution, wherein the concentration ratio of alkali in said first aqueous basic solution to said second aqueous basic solution is between 1: 0.1 to 1: 0.9.
- A method according to claim 1, wherein said separating step is carried out using a method selected from the group consisting of filtration, ultrafiltration, sedimentation and centrifugation.
- 7. A composition of matter, comprising a chitosan prepared according to a method according to claim 1.